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...ers on the Suction Socket Program

Tests of Bonding Material for Suction Valve

Three rings 3/8" thick, 1-3/8" diameter, each with a different peripheral surface, i.e., one smooth, one grooved, and one knurled, were glued into blocks of wood.

Three tests were made in different blocks of wood. In the first block the fit of the rings into the holes was a sliding fit. In the second and third, the rings had to be pushed in by the fingers. The bonding procedure was simple. After curing the rings were pushed out with a pipe nipple, while a larger ring supported the wood block.

1st Test — The wood and rings were coated with Metlbond M4R (Narmco, Inc., 541 Second Street, San Diego, California) and allowed to dry for five minutes. A second coating was allowed to dry thirty to sixty seconds before the ring was inserted. The curing time was forty-eight hours at room temperature.

2nd Test — Same as above, but with a new wood block.

3rd Test — Same as Test No. 1, but Pliobond M20 (U.S. Plywood Corporation, 55 West 44th Street, N. Y. 18, N. Y.) was used.

	Knurled	Grooved	Smooth
1st Test	#240	#130	#150
2nd Test	#400	#260	#220
3rd Test	#440	#180	omitted

Figures represent the total compression force required to break the bond.

Committee on Artificial Limbs
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